

Next generation preparative resin for peptide purification

Features:

- Designed to maximize loadability, resolution, and recovery for purification of peptides
- Long-lasting - alkaline/acidic CIP compatible
- High mechanical stability - allows use with dynamic axial compression columns
- Support files available on request

Specifications:

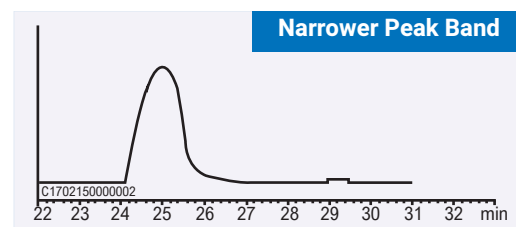
Matrix:	Organic/inorganic hybrid silica
Particle size:	10 μm
Pore size:	200 \AA
Bonded phase:	C8 group
Usable pH range:	2-10 for regular use 2-12 for alkaline CIP

Sharper Peaks at Higher Loading

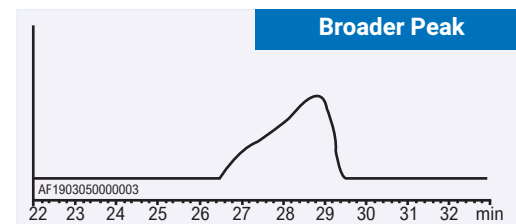
Triart Prep Bio200 C8 exhibits narrower peak shapes when compared to conventional silica based C8 - even under high loading. This provides reduction of fraction volume, and can help reduce time spent performing post-chromatography processes such as condensation and lyophilization.

Column:	150 x 3.0 mm ID
Eluent:	A) 20 mM $\text{CH}_3\text{COONH}_4$ - CH_3COOH (pH 4.5)/acetonitrile (90/10) B) 20mM $\text{CH}_3\text{COONH}_4$ - CH_3COOH (pH 4.5)/acetonitrile (10/90)
Flow rate:	0.43 mL/min
Temperature:	25 $^\circ\text{C}$
Detection:	UV at 295 nm
Injection:	100 μL
Sample:	Insulin human recombinant (100 mg/mL)

Triart Prep Bio200 C8
10 μm , 200 \AA

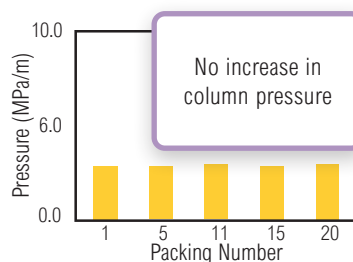


Conventional Silica-based C8
13 μm , 100 \AA



Excellent Mechanical Stability

Triart Prep Bio200 C8 is built on a hybrid particle with high mechanical stability. It can be packed and unpacked repeatedly and used in dynamic compression columns with minimal particle fractures and minimal pressure build-up.

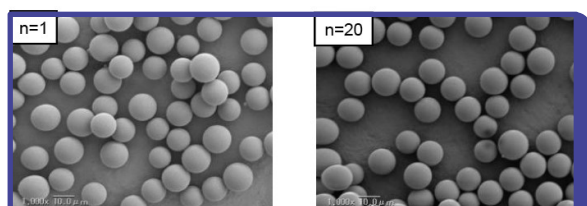


Pressure Measurement Conditions

Eluent:	Methanol/water (85/15)
Flow rate:	50 mL/min
Temperature:	Ambient

Packing Conditions

Packing material:	YMC-Triart Prep Bio200 C8 (10 μm , 200 \AA)
Column size:	100 x 50 mm ID
Packing pressure:	6.5 MPa



SEM Images
(after 1st run versus 20th run)

Regeneration with Alkaline solution

Repeat sample injections may induce adsorption of proteins, which could result in the loss of retention and/or loss of resolution of the target molecule. An alkaline cleaning in place (CIP) procedure is an effective remedy to restore performance. YMC-Triart Prep Bio200 C8 exhibits outstanding stability in alkaline conditions, and users can expect extended stationary phase lifetime particularly after repeated CIP cycles.

Injection Conditions

Column Size: 50 x 4.6 mm ID

Eluent: A) Water/TFA (100/0.1)
B) Acetonitrile
26-36 %B (0-3 min), 36 %B (3-4 min),
26 %B (4-7 min)

Flow rate: 1.0 mL/min

Temperature: 25 °C

Detection: UV at 280 nm

Injection: 30 µL

Sample: Insulin (10 mg/mL)

Test Procedure

Sample Injection



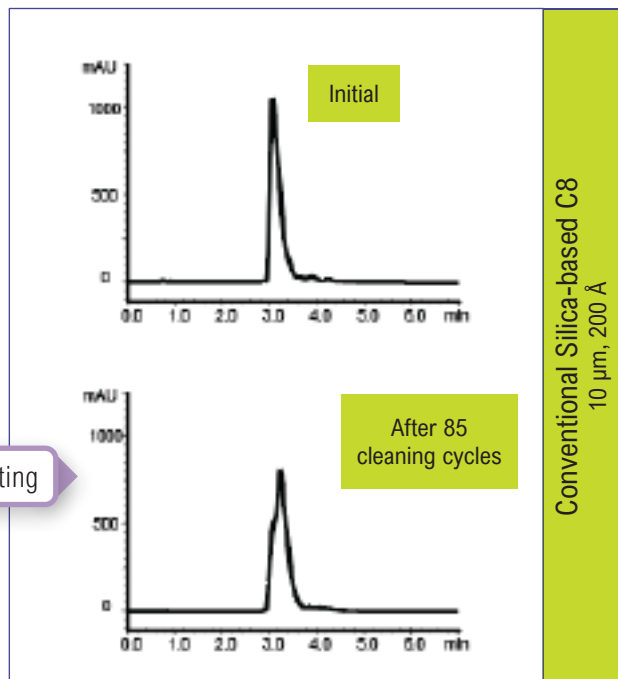
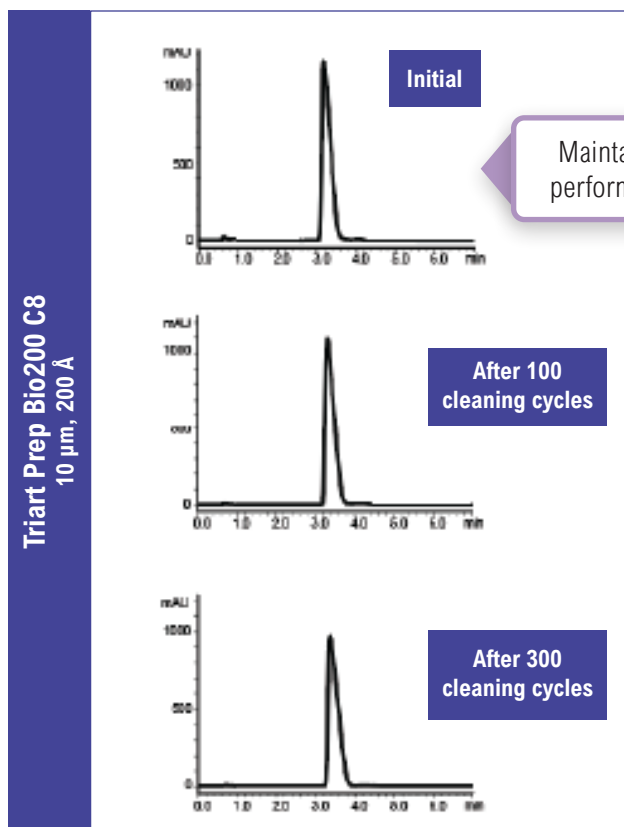
Cleaning with alkaline solution
0.1 M NaOH/acetonitrile (50/50)
(10 column volumes*)

*3 column volumes is sufficient in general.



Neutralization and cleaning with organic solvent

- 1) acetonitrile/water (20/80)
- 2) acetonitrile/water (90/10)



Ordering Information

Product Name	Particle Size (µm)	Pore Size (Å)	Part Number
YMC-Triart Prep Bio200 C8	10	200	TOB20S11

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